

**ATTACHMENT J-15 -INTEGRATED WORK CONTROL SYSTEMS AND  
REPORTING REQUIREMENTS**

The following Environmental Management (EM) policies and guidance apply to Section H, Integrated Contractor Work Control Systems and Reporting Requirements.

**A. Project Control System**

**1. Capital Asset Projects:**

- a. DOE Order 413.3B, Program and Project Management for the Acquisition of Capital Assets, dated November 29, 2010 and its associated Guides
- b. DOE Work Breakdown Structure Handbook, August 16, 2012
- c. Primavera Project Manager version P6 (or most current version) for scheduling activities to ensure standardization
- d. American National Standards Institute, Earned Value Management System Guidelines ANSI/EIA-748-C, dated June 2007 (or most current version).
- e. Contract Performance Reports in the following seven formats unless specified otherwise. For instructions on how to fill the forms refer to DI-MGMT-81861 (item A.3.f.).
  - i. Format 1, DD Form 2734/1, March 05, Work Breakdown Structure
  - ii. Format 2, DD Form 2734/2, March 05, Organizational Categories
  - iii. Format 3, DD Form 2734/3, March 05, Baseline
  - iv. Format 4, DD Form 2734/4, March 05, Staffing; and
  - v. Format 5, Form Number: N/A , Explanations and Problem Analysis
  - vi. Format 6, Form Number: N/A, Integrated Master Schedule
  - vii. Format 7, Form Number: N/A, Electronic History and Forecast File
- f. Data Item Description, DI-MGMT-81468, Contract Funds Status Report (CFSR) or equivalent
- g. Contractor Project Performance (CPP) Upload Requirements for Project Assessment and Reporting System (PARS II), Version 1.7, dated June 25, 2011 (or most current version)
  - i. Interconnection Security Agreement for Project Assessment and Reporting System (PARS II), Version 1.6, dated June 30, 2010 (or most current version).
  - ii. PARS II New Contractor Information for Interconnection Security Agreement, V1.0, November 18, 2010 (or most current version).
- h. EM's Environmental Cost Analysis System (ECAS) User's Guide (The Guide is located at <http://apps.emcbc.doe.gov/ecas/> for registered ECAS users.)

**2. Operations Activities:**

- a. Office of Environmental Management's Operations Activities Protocol, dated March 15, 2012
- b. DOE Work Breakdown Structure Handbook, August 16, 2012
- c. Primavera Project Manager version P6 (or most current version) for scheduling activities to ensure standardization

- d. If Earned Value Management System (EVMS) is required, American National Standards Institute, Earned Value Management System Guidelines ANSI/EIA-748-B, dated June 2007 (or most current version) (If EVMS is not required see paragraph C. Performance Reporting table, Operation Activities.)
  - e. Contract Performance Reports in the following five formats unless specified otherwise. For instructions on how to fill the forms refer to DI-MGMT-81861 (item A.3.f.)
    - i. Format 1, DD Form 2734/1, March 05, Work Breakdown Structure
    - ii. Format 3, DD Form 2734/3, March 05, Baseline; and
    - iii. Format 5, Form; N/A, Explanations and Problem Analysis
    - iv. Format 6, Form: N/A, Integrated Master Schedule
    - v. Format 7, Form: N/A, Electronic History and Forecast File
  - f. Data Item Description, DI-MGMT-81468, Contract Funds Status Report (CFSR) or equivalent
  - g. Integrated Planning, Accountability, and Budgeting System – Guidance Documents, dated June 2011 (or most current version).
3. **Other Documents:** The following documents provide background and context for planning and reporting requirements in Section H, Integrated Contractor Work Control Systems and Reporting Requirements:
- a. Federal Acquisition Regulation (FAR) and Department of Energy Acquisition Regulation (DEAR)
  - b. DOE Acquisition Guide
  - c. Office of Environmental Management Corporate Work Breakdown Structure, November 9, 2011
  - d. Work Breakdown Structures, MIL-STD-881C
  - e. Data Item Description, DI-MGMT-81334D, Contract Work Breakdown Structure
  - f. Data Item Description, DI-MGMT-81861, Integrated Program Management Report (IPMR), June 20, 2012 (<http://www.cms.gov/Research-Statistics-Data-and-Systems/CMS-Information-Technology/EarnedValueManagement/Downloads/IPMR-DID.PDF>)
  - g. IPMR Final Implementation Guide, Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (OUSD AT&L) Performance Assessments and Root Cause Analyses (PARCA), January 24, 2013
  - h. Over Target Baseline and Over Target Schedule Guide, OUSD AT&L (PARCA), December 5, 2012
  - i. Environmental Cost Element Structure (ECES), ASTM International Designation E: 2150-02 DOE Adjunct to ASTM 2150-02

## **B. Baseline Development and Performance Reporting**

### **1. Contract Performance Baseline Submittal**

- a. Contract Performance Baseline (CPB) segments for performance planning, tracking and reporting will generally map to level 4 of the Corporate Work Breakdown Structure (CWBS) (see Section H. [5413, Table 1.](#))

- b. The full CPB and CPB segments must reflect the requirements of the Contract SOW, identify key milestones and performance metrics (regulatory, DOE, and incentive) and be consistent with the estimated cost or target cost (excluding fee/profit and cost overruns) in Section B of the contract as agreed to by the contractor and the Government.
- c. CPB segment(s) for capital asset projects must meet applicable requirements of DOE Order 413.3B to support the development of the Performance Baseline (PB) (See Section D, Baseline Terms for definition) by DOE for Acquisition Executive (AE) approval.
- d. CPB segment(s) for operations activities will consist of detailed work plans for current and succeeding fiscal years; at a minimum, planning level work plans are required for the remainder of the Contract period of performance. CPB for operations activities will include a Management Plan that documents contractor's process for work planning and management including change control, performance tracking and reporting systems and methods. The Management Plan will also document any assumptions, regulatory requirements, safety and quality assurance management, risk management, milestones and metrics, budget profile, roles and responsibilities of the contractor's integrated management and support team.
- e. WBS will start for each CPB segment at the CWBS level 4, and further broken down into appropriate elements for planning, budgeting, scheduling, cost accounting, work authorization, measuring progress, and management control. The WBS must be extended to the level necessary for management action and control based on the complexity of the work (See H. Clause, Section B, Baseline Development and Performance Reporting). WBS and WBS dictionary sheets or scoping narratives will be at the level at which costs are collected. The WBS submittal shall include a cross-reference of the WBS elements to the CPB segment and CLIN consistent with the Contract Line Item Number Assignment against Contract Structure.
- f. The Initial CPB is the baseline plan that must be submitted at Contract award. It shall be 100% aligned with the scope, cost and schedule as submitted with the contractor's proposal with any revisions resulting from negotiations leading to Contract award. The Interim CPB is generally required within 90 days from contract award or Notice to Proceed and will cover the first approximately 12 months of the Contract.
- g. The Interim CPB must match the scope and cost for this period in the Contract. When the Contract includes multiple projects and operations activities the Interim CPB allows tracking of the scope, cost and schedule for each CPB segment until the full CPB with its unique segments are in place.
- h. The full CPB will subsume the Interim CPB as currently approved in its entirety. An Interim CPB is required to be submitted during the Contract Transition Period that will cover the first approximately 12 months of the Contract (See Section D.4.a. for more details. The full CPB will be an extension of the Interim CPB that includes any modifications approved up to the time when the full CPB is submitted.

### C. Performance Reporting

CPB Segment	Reporting Requirement
<b>Capital Asset Projects</b> where EVMS is required	<p>Post Critical Decision (CD-2): Monthly Performance Report will include Contract Performance Reports (CPR) formats 1 through 7 and a Contract Funds Status Report (CFSR). The reports shall be consistent with paragraph A.1. The CPR data shall accurately reflect how work is being planned, performed, and measured and shall be consistent with the actual Contract status. The reports will include the earned value analysis of the prior month, and Format 5 Variance Analyses are required for Control Accounts (CA) with current or cumulative cost or schedule variances exceeding thresholds established by the CO.</p> <p>[Note: PARS II is the central repository for key Departmental-level project information.</p> <p>No later than the <u>last workday of every month</u> Earned Value (EV) data is provided from contractor's systems directly into PARS II. The data must be current as of the closing of the previous month's accounting period. DOE 413.3B requires EV reporting into PARS for projects with Total Project Cost (TPC) &gt; \$20M.</p> <p><u>Pre CD-2</u>: The monthly Performance Report will include narrative description of scope accomplished, cost incurred versus plan (CPB) and status of CPB milestones and deliverables.</p>
<b>Capital Asset Projects</b> where EVMS is not required	<p>Monthly Performance Report will include narrative description of scope accomplished, cost incurred versus plan (CPB), any related impacts and corrective action, and status of CPB milestones and deliverables.</p>
<b>Operations Activities</b>	<p>Monthly Performance Report will include narrative description of scope accomplished, progress on corporate and Contract specific performance metrics, costs incurred versus CPB plan, any related impacts and corrective action, and status of CPB milestones and deliverables.</p> <p>If the Contract requires EV reporting, the contractor's Monthly Performance Report for each CPB segment will include Contract Performance Reports (CPR) formats 1, 3, 5, and 6.</p> <p>If the CPB segment consists primarily of Level of Effort (LOE) activities, the status report will tabulate planned versus actual cost by major functions as agreed to between the contractor and the CO.</p> <p>[Note: IPABS is the central repository for EM planning and performance data. Contractor Monthly Performance Report is used by the site or field office to enter the monthly performance data into IPABS.]</p>

## **D. Baseline Terms**

DOE and EM use baseline terms to communicate Contract and project status. Therefore it is critical for contractors working on DOE contracts to understand and use consistent terminology to promote effective communication and performance. The following definitions and explanations are provided to ensure a common understanding and clarification of Contract language consistent with the requirements of DOE O 413.3B.

### **1. Contract Performance Baseline (CPB)**

- (a) The Contract Performance Baseline (CPB) represents the cost, schedule, and the entire scope and entire period of performance as it relates to the total estimated cost of the Contract exclusive of fee and any contract overruns as stated in Section B of the Contract. Contract Budget Base (CBB) is the cost element of the CPB and equals the Estimated Cost (excluding fee and cost overrun,). (See D, Baseline Terms, 2.(b) figure 1),

Many EM contracts include multiple capital asset projects as well as multiple operations activities. The CPBs for each capital asset project and each operations activity in a contract that has multiple projects and operations activities are called CPB segments. Contract segments may be pre-defined in a Contract as CLINs, but may also be identified later during Contract execution as the work execution approach becomes clearer and the contractor and DOE mutually agree to further sub-divide (“chunk”) larger activities or projects into more manageable segments. The full CPB for a Contract with multiple projects and operations activities is the sum of all the CPB segments.

EM has put in place a Corporate Work Breakdown Structure for its entire program scope. See reference document listed in paragraph A.3.c. Level 4 of the CWBS are the Activity Building Blocks (ABBs). The CPB segments may map to one or more ABBs, but an ABB can only be part of one CPB.

- (b) Performance Measurement Baseline (PMB) is the baseline cost that encompasses all contractor project work packages and planning packages, derived from summing all the costs from the Work Breakdown Structure (WBS). Management Reserve (MR), contingency, fee, and DOE direct costs are not part of the Performance Measurement Baseline. The PMB is the benchmark used within EVM systems to monitor project (and Contract) execution performance in the Contract. A PMB must be in place and under configuration control for capital asset projects past CD-2.

### **2. Baseline Terminology for Capital Asset Projects**

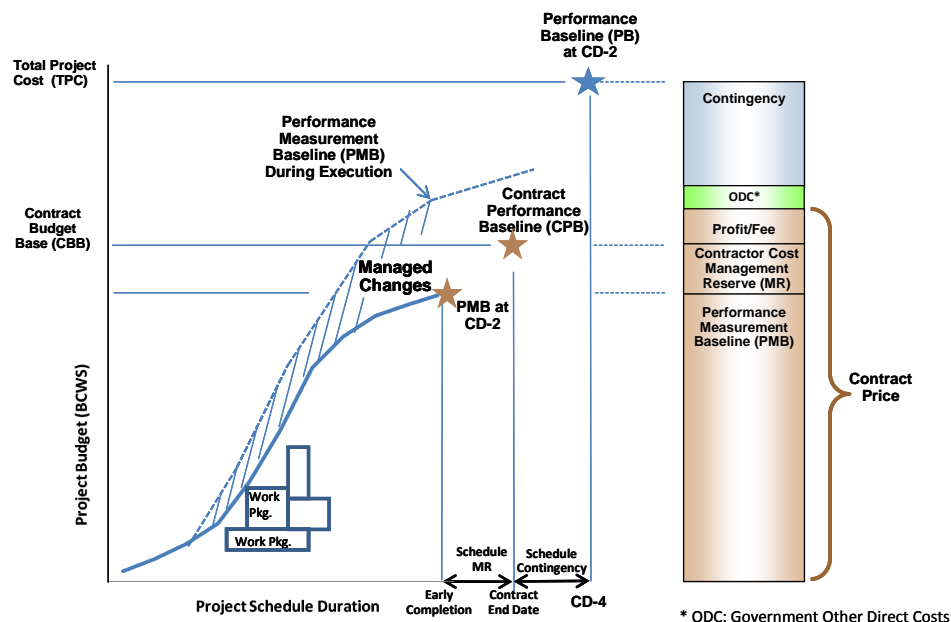
- (a) Performance Baseline (PB) is the collective key performance, scope, cost, and schedule parameters, which are defined for all capital asset projects at Critical

Decision (CD)-2 (See Figure 1). Performance Baseline includes the entire project budget (TPC including fee and contingency).

$$PB = PMB + MR + \text{Contingency} + \text{Fee} + \text{DOE Other Direct Cost (DOE ODC)}$$

- (b) CPB Segment for a Capital Asset project represents the contractor's work plan for planning and executing a capital asset project as a stand-alone portion of the full CPB. Depending on the stage of a project with respect to its acquisition cycle, i.e. at CD-0 versus at CD-3, the CPB documents required to be submitted will vary. For example, the CPB for a project that is between CD-0 and CD-2 will include all applicable documents for the stage of the project as specified in DOE O 413.3B, and a plan to get to CD-2 through CD-4.

**Figure 1 – Performance Baseline at Contract Award, Key Terms and Relationships for Capital Asset Projects**

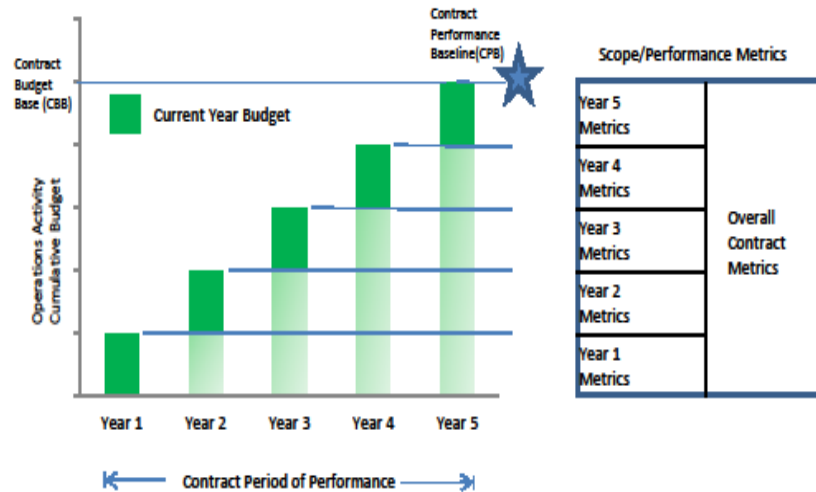


### 3. Baseline Terminology for Operations Activities

- (a) Fiscal Year Work Plans (FYWP): FYWPs are annual work plans that define the work scope to be accomplished in each fiscal year thru the Contract period of performance based on planned budget allocations. FYWP for each operations activity provides the scope, cost, schedule, performance metrics, milestones, assumptions, and risks associated with the operations activity. Even though the FYWP is a Federal document, it is based on the contractor's CPB segment for the operations activity (See Figure 2 below).

- (b) CPB Segment for an Operations Activity: A CPB segment for an operations activity represents the contractor's work plan for planning and executing an operations activity through the Contract period of performance in accordance with the requirements of the Operations Activities Protocol (See Paragraph A.2.a).

**Figure 2 – Contract Performance Baseline for an Operations Activity**



#### 4. Other Baseline Terms

- (a) Contingency: For capital asset projects, contingency is the portion of the project budget that is available for risk uncertainty within the project scope, but outside the scope of the Contract. Contingency is budget that is not placed on the Contract and is included in the TPC. Contingency is controlled by Federal personnel as delineated in the Project Execution Plan (PEP).
- (b) Initial CPB is simply the baseline plan at Contract award. It should be the scope, cost and schedule as submitted with the contractor's proposal with any revisions resulting from negotiations leading to Contract award.
- (c) Interim CPB: An Interim CPB is generally required within 90 days from Notice to Proceed and will cover the first approximately 12 months of the Contract. The Interim CPB must match the scope and cost for this period in the Contract. When the Contract includes multiple projects and operations activities the Interim CPB allows tracking of the scope, cost and schedule for each CPB segment until the full CPB with its unique segments are in place.
- (d) DOE Other Direct Costs (ODCs): For capital asset projects, DOE ODCs are DOE costs attributable to the project that are outside of the Contract.
- (e) PBS Life Cycle Cost: In 1997, EM organized its entire cleanup program at each site into a corporate Project Baseline Summary (PBS) structure. EM formulates its annual budget request to Congress using the PBS structure and maintains configuration control of lifecycle cost estimates for each PBS. PBSs include costs for both capital asset projects and operations activities through completion of cleanup at each site.

PBS Life Cycle Cost =

$$\text{Prior actual costs} + \text{Sum of CBBs for current contract(s), Fee, Contingency, and Other DOE Costs} + \text{Estimate of cleanup work through completion}$$

- (f) Management Reserve (MR): MR is an amount of total contract budget and schedule withheld for management control purposes by the contractor. Management Reserve is not part of the Performance Measurement Baseline. .

Note: MR is established after Contract award from within the Contract Budget Base (CBB) to effectively manage contract work scope. Also, MR is not a separately priced cost element in a contractors' cost proposal. The expectation is that the contractor's proposal takes into consideration any contractor-owned performance risks associated with delivery of the proposed scope of work. MR is necessary to effectively implement EVMS, as such if the contract requires EVMS reporting, each CPB segment must establish a risk informed MR no later than full CPB submittal. The use of MR should be tied to changes that have scope, schedule, and budget impact at the control account level in order to be compliant with ANSI/EIA 748 (current version).

- (g) Typical Baseline Documents:
- i. WBS and WBS dictionary
  - ii. Integrated Resource-Loaded Schedule with monthly Budgeted Cost of Work Planned when EV is required, supported by cost and schedule basis
  - iii. Annual work plans for Operations Activities
  - iv. Overall cost estimate with supporting basis of estimates
  - v. Documentation of risks, assumptions, risk analysis, determination of a Management Reserve (MR) and a Risk Management Plan
  - vi. Contractor's Project Management Plan including Change Control process
- (h) Work Breakdown Structure (WBS): The WBS is a product-oriented hierarchical decomposition of the work required to accomplish the project objectives and produce the contractual deliverables. The WBS should subdivide the work into smaller, independent pieces of work; with each descending level of the WBS representing increasingly detailed definition of the planned project work. Contractor's WBS will flow down from Level 4 of EM's Corporate WBS<sup>1</sup> (CWBS) - see reference document listed in paragraph A.3.c. The WBS provides the basis for all work control system components, including estimating,

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<sup>1</sup> CPB segments for performance planning, tracking and reporting will generally map to level 4 of the CWBS but may be tailored, as negotiated by CO and contractor.



scheduling, budgeting, performing, managing, and reporting. Cost and schedule estimates should be developed using activity or commodity-based cost estimating techniques to facilitate review and approval by DOE.